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## 2AC Growth Sustainable 1/3

### No ecological overshoot – growth is sustainable

Taylor, Director of Natural Resource Studies at the Cato Institute, ‘2 (Jerry, August 26, “Sustainable Development: A Dubious Solution in Search of a Problem” Policy Analysis, www.cato.org/pubs/pas/pa449.pdf)

If resources are growing more abundant while the concentration of pollutants in air sheds and watersheds continues to decline, how can we explain the proliferation of various stylized sustainability indices that point to a deterioration of the planet’s resource base? There are five common weaknesses with such reports. First, they are almost always built upon a selective but fundamentally arbitrary or irrelevant set of indicators. Second, they are often built not upon actual resource data but upon hypotheses or theories about resource health that do not comport with the data or that rest upon highly suspect data fundamentally inconsistent with the larger data sets available to analysts. Third, they ignore the well-documented propensity of capitalist societies to create and invent new resources when old resources become relatively more scarce (that is, they assume that resources are fixed and finite when they are not). Fourth, they are highly aggregated and often subjective calculations of data sets that lack common denominators. Finally, they are frequently heavily biased by ideological assumptions about politics and government action. Accordingly, they provide little help to policy analysts or political leaders.

2AC Growth Sustainable 2/3

### The upward sophistication of technology can create sustainable growth that solves a host of global problems –we can exploit this trend or face extinction

The Futurist 3-2 (“Emerging Technologies And the Global Crisis of Maturity”, <http://www.smalltimes.com/news/display_news_story.cfm>? Section=WireNews&Category=HOME&NewsID=174725)

Despite the present mess in energy and environment policy, there is great opportunity for sustainable, unifying growth. The financial crisis of 2008 is likely to leave a long and painful legacy, but this downturn could draw entrepreneurs and governments to direct unused labor, capital, and knowledge toward the crucial challenge of sustainability and even pull the global economy out of recession. Not only is the energy and environment issue an opportunity in disguise, but also the intertwined problems facing corporat ions and governments encourage the type of collaboration badly needed today. There is a unifying purpose to serving this higher calling of protecting the earth, and the prospects are so great that they justify a Green Manhattan Project. Figure 1 shows that we expect business to create an economic boom as green practices move into the mainstream over the next five years or so. The decade of the 2010s should prove critical to address global warming, which would also help in the transition to alternative energy by about 2020. These forecasts suggest the move to sustainability is beginning, and we have a rough timetable of how and when it will occur, although with the normal level of doubt that accompanies historic change. Modern economies are adapting to new realities with a wave of innovative energy sources, many tucked into the interstices of society: hybrid cars, solar panels on roofs, windmills on a farm, ethanol plants in Iowa, and nuclear power plants where they are wanted. Sustainable practices promise to become one of the most crucial sectors of the economy. In Earth in the Balance, Al Gore noted that pollution control was a $500 billion market in 2000 and is expected to reach $10 trillion in 2020, larger than auto, health care, and defense. The U.S. government could invite major corporations and other governments to work together on improving environmental management, alternative energy, and other sustainable technologies. These same groups should agree on a system of carbon taxes or caps to internalize the costs of producing greenhouse gases and allow the market to solve environmental problems more efficiently. We also need to encourage innovative solutions, like sequestering carbon dioxide, planting trees, and using industrial ecology. With hard work and good leadership, the world could realize the benefits of ecologically safe living during the next 10 to 20 years. A rising interest in protecting the environment is starting to integrate industries, energy systems, farming, homes, and offices into a living tapestry that sustains life. Authors Paul Hawken, Amory Lovins , and L. Hunter Lovins call it a "natural capitalism," in which the environment is recognized as a valuable asset that produces $33 trillion of economic benefits annually. The challenges are enormous but being resolved, and the path ahead is fairly clear. Now we need to improve the technology, implement it widely, and find the political will. Shifting the Structures of Society One of the great dilemmas posed by the crisis of maturity is to reform institutions for this different world. Trends noted in my book, Technology's Promise, suggest possibilities for transforming social institutions using a combination of enterprise and community. For example, that's how the United States might improve health care and relieve its mounting costs, which are approaching 20% of GDP. While the political right argues for letting the free market solve the complex dilemma and the political left wants a government-paid system, a solution seems to be emerging that synthesizes government support and market forces. Here is a quick outline of the new consensus on U.S. health care: \* Universal insurance coverage. The federal government would require all to have basic health-care insurance, and it might organize "exchanges" through which people can select among competing plans. The poor would be offered free vouchers good for basic health coverage, while the rich may be able to opt out by being self-insured. \* Employers relieved of responsibility. Corporations and other employers would be freed of the responsibility for health care. Business could then become more competitive by avoiding the $500 billion they now spent annually on health insurance. \* Providers evaluated on results. One of the great flaws in the present system is that there is little or no information to help make sound decisions. But plans are under way to require hospitals and physicians to be evaluated for providing results. Patients could then make wiser choices and thereby allow market forces to improve the system. \* Minimal added cost or bureaucracy. This solution would simply shift costs from employers to individuals, resulting in little added cost or federal programs. The costs of vouchers for the poor could be offset by higher tax revenue as corporations are better able to drive robust growth and as market forces improve efficiency of the entire system. Time to Grow Up or Perish Technological, economic, and political projections make it clear that the world must mature if it is to survive. The crisis of maturity may not prove catastrophic if acted on in time, but a major turning point seems inevitable as the multiple threats of worldwide industrialization, energy shortages, climate change, environment collapse, nuclear holocaust, spreading terrorism, global conflict, and other unknown crises reach critical levels about 2020. The transition could happen anytime, but it is hard to conceive of a future in which today's systems could survive much beyond 2020, let alone 2030. This may seem too heroic, but recall our discussion of how technological evolution drives a life cycle of the planet, much like the life cycle of any organism but infinitely larger. Whether a teenager shedding the baggage of youth to become a responsible adult or a civilization facing the crisis of maturity, the imperative is much the same: Grow up or perish. One case that bears scrutiny is General Motors. After losing its dominance of auto markets steadily over the past 30 years to Toyota, GM engineers rallied around the goal of introducing the world's first plug-in hybrid car with advanced lithiumion batteries. GM could still fail, obviously, but Maryann Keller, a longtime analyst of the company, thinks it's "a generational change." Historic transitions on the scale of the technology revolution are hard to grasp because they lead to a more sophisticated way of life that has never existed before. Understanding the evolutionary forces at work - both in hard technologies and in social systems - helps us see that the world is undergoing a natural process of maturity, with global intelligence and awareness increasing dramatically. Our great challenge now is to assure that social institutions evolve and mature along with the material technologies. It will be necessary to replace today's cumbersome social systems, religious dogmas, heated emotions, partisan ideologies, and other commonly outmoded forms of thought and consciousness that now form the major obstacles to progress.

2AC Growth Sustainable 3/3

### Long term growth sustainable

Wolf, associate editor and chief economics commentator at the Financial Times , ‘7 (Martin, January 9, “Is the High Rate of Worldwide Economic Growth Sustainable?” Financial Times, http://economistsview.typepad.com/economistsview/2007/01/is\_the\_high\_rat.html)

Globalisation’s future is the big long-term question, by Martin Wolf, Commentary, Financial Times: ... Let us ask ... a ... question: how strong and sustainable is the underlying dynamic of the world economy? As Lawrence Summers noted in his most recent column ..., the world economy in aggregate grew more during the past five years than in any five-year period since the second world war. Growth is not merely strong. It is also widely shared. In 2006, ... the economies of the high-income countries probably grew by 3.1 per cent,... Meanwhile, the economies of the developing countries ... expanded by 7.0 per cent, after 6.6 per cent in 2005 and 7.2 per cent in 2004. This performance has occurred in spite of significant economic and political shocks: the collapse of the stock market bubble in 2000, the terrorist attacks of September 11 2001, wars in Afghanistan and Iraq, the continued uncertainty about future large-scale terrorism, the jump in oil prices, protectionist rhetoric in a number of high-income economies and a breakdown in the Doha round of multilateral trade talks. ... [T]he underlying engine of the world economy is immensely powerful. ... Today’s world economy is being driven by four closely interconnected forces: technological innovation...; entry into the world economy of the vast majority of human beings ...; the “catch-up” process in these economies; and the integration of global markets in goods, services and capital that we call globalisation... To these forces should be added the background condition of monetary stability. ... The implication of this perspective is that any slowdown – or “mid-cycle correction” – will be short-term and shallow. Not only would the underlying dynamic remain but such a slowdown would trigger offsetting forces, including more relaxed monetary policies and, in all probability, lower oil prices, as well. Unfortunately, there is an alternative perspective. It is that much of the world suffers from a huge surplus of savings over investment. ... The effort at absorbing this surplus has had two closely interconnected consequences: the first has been the emergence of the so-called “global imbalances” in which the US has absorbed about three-quarters of the excess savings of the rest of the world; the second has been a long period of relaxed monetary policy, particularly in Japan and the eurozone, but also for some time in the US as well. This, it is argued, has had powerful effects on asset prices, particularly house prices in a number of high-income countries. Strong house prices have, in turn, sustained demand at high levels... The more persuasive is this “liquidity” story, the more plausible it becomes that the correction is going to be more painful than conventional wisdom believes. ... How then does one assess prospects? Provided the broad story of economic dynamism remains credible, the world economy will probably overcome temporary difficulties... So how plausible is maintenance of the underlying dynamic? For economic policy, this raises two big questions: the first is whether inflation will be contained; the second is whether globalisation will be sustained. On the former, there is no reason to forget what we have so painfully learned. On the latter, however, there is greater uncertainty. One reason for this is that even a relatively mild slowdown might shift policy in high-income countries, especially in the US, in a much more protectionist direction. The widespread perception that the majority of the population has not been gaining from recent growth makes that outcome more likely... An open economy will become unsustainable if a majority concludes it is against its interests. Even more important are the fragile political underpinnings of global economic integration: the US is on the verge of what may ultimately prove the most significant defeat in its history; an attack on Iran looks possible; and North Korea has become a nuclear power. Above all, we live in a world marked by shifting relative power and religious and political turmoil in much of the Islamic world. The big question then is not whether there will be some correction – even, at worst, a US recession... The world economy should be able to survive such a jolt, provided its underlying dynamism remains in place. What matters far more is the future of economic globalisation. On that we can hope, but cannot be confident. Its viability will depend on wise leadership – a commodity, as usual, in frighteningly small supply.

## 1AR Growth Sustainable

### Growth sustainable and key to ecoprotection

Taylor, Director of Natural Resource Studies at the Cato Institute, ‘2 (Jerry, August 26, “Sustainable Development: A Dubious Solution in Search of a Problem” Policy Analysis, No 449, www.cato.org/pubs/pas/pa449.pdf)

The concept seems innocuous enough. After all, who would favor “unsustainable development”? A careful review of the data, however, finds that resources are becoming more—not less—abundant with time and that the world is in fact on a quite sustainable path at present. Moreover, the fundamental premise of the idea—that economic growth, if left unconstrained and unmanaged by the state, threatens unnecessary harm to the environment and may prove ephemeral—is dubious. First, if economic growth were to be slowed or stopped—and sustainable development is essentially concerned with putting boundaries around economic growth—it would be impossible to improve environmental conditions around the world. Second, the bias toward central planning on the part of those endorsing the concept of sustainable development will serve only to make environmental protection more expensive; hence, society would be able to “purchase” less of it. Finally, strict pursuit of sustainable development, as many environmentalists mean it, would do violence to the welfare of future generations. The current Western system of free markets, property rights, and the rule of law is in fact the best hope for environmentally sustainable development.

### Trainer’s simpler world is fantasy – capitalist growth will always occur

Isbister 1 (John, prof of econ at the U of California at Santa Cruz, “Capitalism and Justice,” p. 46, jam)

Some in the capitalist world try to retain or re-create the best parts of precapitalism. Some Amish and Mennonite communities are based on precapitalist values, as are some other faith-based groups. The 1960s and 1970s saw the creation of secular alternative rural communes, communities whose members tried to eliminate all marks of distinction between them, to be self-sufficient, and to live simply. The communes had some successes, but most eventually collapsed. Communities such as these have attempted to embody precapitalist values, but none has succeeded in cutting itself off from capitalist influences: from the market, from the media, from the legal system, and from other influences of the modern world. While we can learn from our antecedent societies, we cannot return to them. The door has been closed.

## 2AC Transition Wars

### Their author concedes economic decline causes nuclear wars and massive loss of life

Lewis, Professor of History from the University of Colorado, ’98 (Chris, “The Paradox of Global Development and the Necessary Collapse of Modern Industrial Civilization” The Coming Age of Scarcity, p 56)

Most critics would argue, probably correctly, that instead of allowing underdeveloped countries to withdraw from the global economy and undermine the economies of the developed world the United States, Europe, Japan and others will fight neocolonial wars to force those countries to remain within the collapsing global economy. The neocolonial wars will result in mass death, suffering, and even regional nuclear wars. If First World countries choose military confrontation and political repression to maintain the global economy, then we may see mass death and genocide on a global scale that will make the deaths of World War Two pale in comparison. However, these neocolonial wars fought to maintain developed nations economic and political hegemony, will cause the final collapse of our global industrial civilization. These wars will so damage the complex economic and trading networks and squander material, biological, and energy resources that they will undermine the global economy and its ability to support the earths 6 to 8 billion people. This would be the worst-case scenario for the collapse of global civilization.

### Low consumption is not sustainable – it’ll send the economy into a tailspin – double dip

Froomkin 10 (Dan, “7 Things About The Economy Everyone Should Be Worried About,” January 23, <http://www.huffingtonpost.com/2010/01/23/7-things-about-the-econom_n_433688.html>)

In an interview with Fox News back in November, Obama himself raised the possibility that the economy could once again head into a tailspin: I think it is important though to recognize that if we keep on adding to the debt, even in the midst of this recovery, that at some point, people could lose confidence in the US economy in a way that could actually lead to a double-dip recession. This is the classic Wall-Street influenced worst-case scenario -- with government spending as the villain and interest rate increases as the ultimate horror, leading to doom. But Obama may be worrying about the wrong side of the Wall Street/Main Street axis. The more likely reason the economy could tank again is because of insufficient demand. For the past decade or so, the growth of the U.S. economy was primarily fueled by the credit and housing bubbles -- which now turn out to have been illusory. So what will spur growth this time? Especially with so many Americans out of work? Where's the demand going to come from? Citing, among other things, the likelihood that the U.S. savings rate could go markedly higher in the coming years, Nobel laureate economist Joseph Stiglitz warns that "we are not seeing a recovery of sustained consumption,"and says there is a "significant chance" of a double-dip recesssion for that reason.

### Hegemonic decline causes transition wars that will inevitably lead to global war

Nye 90 (Joe, Sultan of Oman Professor of International Relations and former Dean of the Kennedy School at Harvard and one of the most influential and respected contemporary IR scholars, pg 17) ET

Perceptions of change in the relative power of nations are of critical importance to understanding the relationship between decline and war. One of the oldest generalizations about international politics attributes the onset of major wars to shifts in power among the leading nations. Thus Thucydides accounted for the onset of the Peloponnesian War which destroyed the power of ancient Athens. The history of the interstate system since 1500 is punctuated by severe wars in which one country struggled to surpass another as the leading state. If as Robert Gilpin argues, international politics has not changed fundamentally over the millennia, “the implications for the future are bleak. And if fears about shifting power precipitate a major war in a world with 50,000 nuclear weapons, history as we know it may end.

## 2AC War 1/3

### Economic collapses makes war the preferred and only means for acquiring resources

Tilford, History Professor at Grove City College, ‘8 (Earl, October 6, “Critical Mass: Economic Leadership or Dictatorship” Center for Vision and Values, http://www.visandvals.org/Critical\_Mass\_Economic\_Leadership\_or\_Dictatorship.php?view\_all=1)

A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations -- the world powers of North America, Europe, and Asia -- need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly. The United States is at the epicenter as the world edges toward critical mass. And the ship of state appears rudderless. The current crisis is as much one of leadership as economics. This is the time for statesmen to come to the fore. So far, political leaders, anxious to preserve and to advance partisan agendas, have engaged in behavior bordering on the infantile. Whether or not men and women of selfless character, statesmen devoted to the preservation of the nation and its precious but always fragile democracy will emerge, remains unclear. But it is clear that if our leadership fails at this critical juncture, the fate of our nation and the world lies in the balance. At this point of critical mass, while rife with politicians, we are impoverished for leadership.

2AC War 2/3

### Collapse of the economy causes conflict to erupt in hotspots around the globe

Friedberg, IR Professor at Princeton, ‘8 (Aaron, “The Dangers of a Diminished America” Wall Street Journal)

Then there are the dolorous consequences of a potential collapse of the world's financial architecture. For decades now, Americans have enjoyed the advantages of being at the center of that system. The worldwide use of the dollar, and the stability of our economy, among other things, made it easier for us to run huge budget deficits, as we counted on foreigners to pick up the tab by buying dollar-denominated assets as a safe haven. Will this be possible in the future? Meanwhile, traditional foreign-policy challenges are multiplying. The threat from al Qaeda and Islamic terrorist affiliates has not been extinguished. Iran and North Korea are continuing on their bellicose paths, while Pakistan and Afghanistan are progressing smartly down the road to chaos. Russia's new militancy and China's seemingly relentless rise also give cause for concern. If America now tries to pull back from the world stage, it will leave a dangerous power vacuum. The stabilizing effects of our presence in Asia, our continuing commitment to Europe, and our position as defender of last resort for Middle East energy sources and supply lines could all be placed at risk. In such a scenario there are shades of the 1930s, when global trade and finance ground nearly to a halt, the peaceful democracies failed to cooperate, and aggressive powers led by the remorseless fanatics who rose up on the crest of economic disaster exploited their divisions. Today we run the risk that rogue states may choose to become ever more reckless with their nuclear toys, just at our moment of maximum vulnerability. The aftershocks of the financial crisis will almost certainly rock our principal strategic competitors even harder than they will rock us. The dramatic free fall of the Russian stock market has demonstrated the fragility of a state whose economic performance hinges on high oil prices, now driven down by the global slowdown. China is perhaps even more fragile, its economic growth depending heavily on foreign investment and access to foreign markets. Both will now be constricted, inflicting economic pain and perhaps even sparking unrest in a country where political legitimacy rests on progress in the long march to prosperity. None of this is good news if the authoritarian leaders of these countries seek to divert attention from internal travails with external adventures. As for our democratic friends, the present crisis comes when many European nations are struggling to deal with decades of anemic growth, sclerotic governance and an impending demographic crisis. Despite its past dynamism, Japan faces similar challenges. India is still in the early stages of its emergence as a world economic and geopolitical power. What does this all mean? There is no substitute for America on the world stage. The choice we have before us is between the potentially disastrous effects of disengagement and the stiff price tag of continued American leadership.

2AC War 3/3

### Societies are still unstable from recession- slow growth accentuates internal problems that drive nations to war

Strauss-Kahn Managing Director IMF ‘9 (Dominique-, Oct. 23, “Economic Stability, Economic Cooperation, and Peace—the Role of the IMF”, http://www.imf.org/external/np/speeches/2009/102309.htm)

Let me stress that the crisis is by no means over, and many risks remain. Economic activity is still dependent on policy support, and a premature withdrawal of this support could kill the recovery. And even as growth recovers, it will take some time for jobs to follow suit. This economic instability will continue to threaten social stability. The stakes are particularly high in the low-income countries. Our colleagues at the United Nations and World Bank think that up to 90 million people might be pushed into extreme poverty as a result of this crisis. In many areas of the world, what is at stake is not only higher unemployment or lower purchasing power, but life and death itself. Economic marginalization and destitution could lead to social unrest, political instability, a breakdown of democracy, or war. In a sense, our collective efforts to fight the crisis cannot be separated from our efforts guard social stability and to secure peace. This is particularly important in low-income countries. War might justifiably be called “development in reverse”. War leads to death, disability, disease, and displacement of population. War increases poverty. War reduces growth potential by destroying infrastructure as well as financial and human capital. War diverts resources toward violence, rent-seeking, and corruption. War weakens institutions. War in one country harms neighboring countries, including through an influx of refugees. Most wars since the 1970s have been wars within states. It is hard to estimate the true cost of a civil war. Recent research suggests that one year of conflict can knock 2-2½ percentage points off a country’s growth rate. And since the average civil war lasts 7 years, that means an economy that is 15 percent smaller than it would have been with peace. Of course, no cost can be put on the loss of life or the great human suffering that always accompanies war. The causality also runs the other way. Just as wars devastate the economy, a weak economy makes a country more prone to war. The evidence is quite clear on this point—low income or slow economic growth increases the risk of a country falling into civil conflict. Poverty and economic stagnation lead people to become marginalized, without a stake in the productive economy. With little hope of employment or a decent standard of living, they might turn instead to violent activities. Dependence on natural resources is also a risk factor—competition for control over these resources can trigger conflict and income from natural resources can finance war. And so we can see a vicious circle—war makes economic conditions and prospects worse, and weakens institutions, and this in turn increases the likelihood of war. Once a war has started, it’s hard to stop. And even if it stops, it’s easy to slip back into conflict. During the first decade after a war, there is a 50 percent chance of returning to violence, partly because of weakened institutions.

## 2AC EKC 1/2

### EKC most accurate model – growth key to ecology

Yandle, PERC Senior Associate and Professor of Economics Emeritus at Clemson University, Chairman of the South Carolina State Board of Economic Advisors, Senior Economist on the President's Council on Wage and Price Stability, and Executive Director of the Federal Trade Commission, Vijayaraghavan, Steven M. Teutsch Fellow in the Office on Smoking and Health of the Centers for Disease Control and Prevention and Research Associate with Clemson University's Center for International Trade, and Bhattarai, Postdoctoral Economist with the International Water Management Institute, Research Scholar at the International Rice Research Institute, and PhD from Clemson University, ‘2 (Bruce, Maya, and Madhusudan, “The Environmental Kuznets Curve: A Primer” Property and Environment Research Center, http://www.perc.org/articles/article688.php)

Since 1991, when economists first reported a systematic relationship between income changes and environmental quality, this relationship, known as the Environmental Kuznets Curve (EKC), has become standard fare in technical conversations about environmental policy (Grossman and Krueger 1991). When first unveiled, EKCs revealed a surprising outcome: Some important indicators of environmental quality such as the levels of sulfur dioxide and particulates in the air actually improved as incomes and levels of consumption went up. Prior to the advent of EKCs, many well-informed people believed that richer economies damaged and even destroyed their natural resource endowments at a faster pace than poorer ones. They thought that environmental quality could only be achieved by escaping the clutches of industrialization and the desire for higher incomes. The EKC's paradoxical relationship cast doubt on this assumption. We now know far more about the linkages between an economy and its environment than we did before 1991. This primer shares this knowledge. There is no single EKC relationship that fits all pollutants for all places and times. There are families of relationships, and in many cases the inverted-U Environmental Kuznets Curve is the best way to approximate the link between environmental change and income growth. The indicators for which the EKC relationship seems most plausible are local air pollutants such as oxides of nitrogen, sulfur dioxide, and particulate matter. The EKC evidence for water pollution is mixed, but there may be an inverted U-shaped curve for biological oxygen demand (BOD), chemical oxygen demand (COD), nitrates, and some heavy metals (arsenic and cadmium). In most cases, the income threshold for improving water quality is much lower than the air pollution improvement threshold. The acceptance of the EKC hypothesis for select pollutants has important policy implications. It implies that some environmental degradation along a country's development path is inevitable, especially during the take-off process of industrialization. Second, it suggests that when a certain level of per capita income is reached, economic growth helps to undo the damage done in earlier years. If economic growth is good for the environment, policies that stimulate growth (trade liberalization, economic restructuring, and price reform) should be good for the environment. However, income growth without institutional reform is not likely to be enough. Improvement of the environment with income growth is not automatic but depends on policies and institutions. GDP growth creates the conditions for environmental improvement by raising the demand for improved environmental quality and makes the resources available for supplying it. Whether environmental quality improvements materialize or not, when, and how, depend critically on government policies, social institutions, and the completeness and functioning of markets. Better policies, such as the removal of distorting subsidies, the introduction of more secure property rights over resources, and the imposition of pollution taxes to connect actions taken to prices paid will flatten the underlying EKC and perhaps achieve an earlier turning point. The effects of market-based policies on environmental quality are expected to be unambiguously positive.

2AC EKC 2/2

### China is a real world test case – EKC is shifting downwards and to the left

Hayward, FK Weyerhaeuser Fellow at AEI and Principal Author of the Index of Leading Environmental Indicators, ‘5 (Steven, November/December, “The China Syndrome and the Environmental Kuznets Curve” American Enterprise Institute for Public Policy Research, Environmental Policy Outlook)

Dismal Future or Turning Point? As dismal as this picture is, the conventional wisdom about China’s environmental future is likely to be wrong. A closer look at facts on the ground and recent trends suggests that China is an excellent test case for the controversial theory known as the “environmental Kuznets Curve” (EKC). The EKC holds that the relationship between economic growth and environmental quality is an inverted U-shape, according to which environmental conditions deteriorate during early stages of economic growth but begin to improve after a certain threshold of wealth is achieved. (See figure 2.) The original Kuznets Curve was named for Nobel laureate Simon Kuznets, who postulated in the 1950s that income inequality first increases and then declines with economic growth. In 1991, economists Gene M. Grossman and Alan B. Krueger suggested the Kuznets Curve applied to the environment. 12 It was a powerful counterargument to the once-conventional view, popular in the aftermath of the “limits to growth” enthusiasm of the 1970s, that economic growth was the enemy of the environment, and the EKC gained wide acceptance as a key development concept in the 1990s, including at the World Bank.13 There is a burgeoning economic literature about the EKC, with the usual controversy over econometric methodology and the robustness of the models. Most of the empirical and econometric research on the EKC examines air and water pollution, as they offer the best data sets for cross-national analysis. Critics argue that the EKC is not statistically robust, that it does not apply to the full range of environmental impacts, and that it does not account for displacement effects, i.e., the “race to the bottom” whereby richer nations outsource their environmental harmful production functions to poorer nations with weaker environmental controls, resulting in net increases in global pollution.14 Defenders of the EKC argue optimistically that the EKC is actually dropping and shifting to the left, meaning that the environmental turning point will be reached sooner in the developing world than in today’s wealthy nations. Developing nations, it is thought, will skip over some of the stages of growth and pollution by adopting cleaner technologies earlier and developing regulatory institutions to control pollution. While further empirical research will no doubt advance our understanding of the strengths and weaknesses of the EKC, China has emerged as a real-world test case. Several EKC studies conclude that sulfur dioxide pollution begins to decline at a per-capita income level in the range of $5,000 to $9,000, and particulates begin to decline at a per-capita income range from $5,000 to $15,000. China is still far from this range, with a current per-capita income of about $3,000. However, by some measures China’s SO2, ozone, and particulate levels may have already peaked and begun declining, offering preliminary evidence that the EKC is dropping and shifting to the left. Jiming Hao and Litao Wang, researchers at Tsinghua University in Beijing, recently published data in the Journal of the Air and Waste Management Association showing declines in the level of ambient air pollution in China from 1990 to 2002, as shown in figures 3–6.15 (The higher levels of air pollution in northern Chinese cities in figures 3–5 are due mostly to the fact that these areas burn much more coal during the winter. (Unlike most U.S. cities, air quality is worst in Beijing during the winter months.) From 1990 to 2002, the number of motor vehicles in China nearly quadrupled, while total energy consumption increased by one-third. Yet as Hao and Wang observe, “the air pollution emissions did not increase as quickly as economic growth and energy consumption, and air quality in Chinese cities has improved to some extent.” China’s SEPA reports some progress in improving the number of cities that achieve their grade II ambient air quality standards (which are comparable to U.S. ambient standards), but as the figures show northern Chinese cities especially have a long way to go to meet the standard. As figure 6 shows, Beijing has made substantial improvement in SO2 levels, but still does not meet China’s grade II standard. (Grade II represents the Chinese air quality standards for urban areas. China’s grade I standards for rural areas are 30 to 60 percent tougher depending on the pollutant.) As has been the experience of the United States and Europe, fossil fuel energy consumption can go up while pollution falls if emission control technology is adopted. This is starting to occur in China at a faster rate than Westerners recognize. China has adopted ambient air quality goals that are, in some cases, nominally more ambitious than U.S. Clean Air Act ambient standard. (See table 1.) China is starting to implement the kind of stationary and mobile source control measures that have been common in the United States and Europe for a generation, and China has adopted the EU’s tailpipe emissions standards for its growing auto fleet, which are comparable to the U.S. tier II tailpipe standards. Among other indicators of progress, Beijing now has the largest fleet of natural gas buses in the world. China has been enacting environmental laws that resemble the landmark legislation the United States and Europe enacted in the 1970s, and SEPA reports that spending for environmental projects is increasing at about 15 percent a year. China even has its own version of the American National Environmental Protection Act (NEPA), requiring construction projects to perform an environmental impact assessment (EIA) as a part of the planning and building permit process. In 2004 over 320,000 construction projects went through the EIA review process. To be sure, China’s environmental reviews may not meet the exacting standards of either the U.S. EPA or the Sierra Club, and even if the optimists are right that the EKC for China is dropping and shifting to the left, it still means that some of the environmental news out of China is going to get worse before its gets better. The central point remains, however, that while China has a long way to go, China’s environmental news may start improving a lot sooner and a lot faster than people expect. Already there are signs that the corner has been turned on areas aside from air pollution. Industrial discharge of petroleum-related pollutants and some heavy metals into rivers and oceans has been cut in half over the last decade.16 Wastewater treatment facilities are being built at breakneck speed; between 2000 and 2005, total wastewater capacity will have doubled. China’s reforestation program appears to be taking flight; SEPA reports that 4.8 million hectares of forestland were planted in 2004.17 And, as figure 7 shows, China is dedicating more land for nature preserves in steadily increasing amounts.

## 2AC Environment 1/3

### Growth increases public demand and action resources to solve the environment

Cross, Professor of Business Law at UT Austin, ‘2 (Frank, Winter, “The Naïve Environmentalist” Case Western Reserve University Law Review, Vol 53, p 491-493)

The world does face a number of serious environmental problems in the developing world. The more developed nations, affluent, with well-developed technology, have gone far toward curing their internal environmental problems. This observation would suggest that the answer to our greatest problems lies not in stopping [\*492] growth or new technologies, but advancing them. A plenitude of evidence supports that suggestion. When the economy is strong, people demand greater environmental protection, but when the economy struggles, environmental protection measures are sacrificed. n94 Moreover, economic and technological growth create the resources necessary to combat environmental threats. n95 During the 1970s and 1980s, the U.S. economy grew by around seventy percent, yet during this same time period, virtually all forms of domestic pollution decreased, some by over ninety percent. n96 Among developed nations, the wealthier countries tend to adopt stronger environmental protection laws and have greater success in reducing air pollution. n97 The relationship between economic growth and pollution often forms an inverted U-shaped curve, sometimes called a Kuznets curve. That is, in the early stages of economic growth, pollution increases along with the economy and production growth, until a tipping point is reached, and pollution begins to decline as growth increases. A substantial body of cross-national empirical evidence supports the validity of the Kuznets curve for pollution and growth. n98 The best known of this research is by Grossman and Krueger of Princeton, who found that the tipping point for numerous forms of air and water pollution, the point where growth begins to reduce the overall pollution load, comes at a level below [\*493] $ 8,000 per capita income. n99 Others found a slightly higher turning point (below $ 10,000) for other forms of air pollution. n100 Different turning points may apply to different substances. For water pollution the turning point may be as low as $ 3,300 for nitrates and as high as $ 17,200 for lead. n101 Other studies have found that the intensity of energy use declines with wealth. n102 Others have found that the Kuznets curve appears to apply to deforestation; as national income rises, deforestation decreases. n103 A study of United States counties found a kind of Kuznets curve for hazardous waste exposure. n104 The even better news is that, over time, the curve seems to be shifting down and to the left, meaning that pollution reduction is occurring at lower levels of income. n105 Lomborg himself presents a clear depiction of the Kuznets curve for particulates and sulfur dioxide, showing that pollution has declined with greater income and over time for all income levels. n106

### Statistical models prove growth solves for the environment

Tierney 9 (John, science columnist for the New York Times, journalism degree from Yale U, cites Nobel Prize winning economist Simon Kuznets, Ph.D from Columbia U, Apr 20, [tierneylab.blogs.nytimes.com/2009/04/20/the-richer-is-greener-curve/] AD: 6-21-11, jm)

In my Findings column, I explain how researchers have discovered that, over the long term, being richer often translates into being greener. Many environmental problems get worse as a country first industrializes, but once it reaches a certain level of income, the trend often reverses, producing a curve shaped like an upside-down U. It’s called a Kuznets curve (in honor of the economist Simon Kuznets, who detected this pattern in trends of income inequality). As promised in the column, here are some graphic examples of Kuznets curves for sulphur dioxide pollution, as measured in an assortment of rich and poor countries, and also as measured over time in the United States. Each line is an environmental Kuznets curve for a group of countries during the 1980s. The levels of sulphur dioxide pollution (the vertical axis) rise as countries becomes more affluent (the horizontal axis). But then, once countries reach an economic turning point (a gross domestic product close to $8,000 per capita), the trend reverses and air pollution declines as countries get richer. In this analysis by Xiang Dong Qin of Clemson University, the green line shows countries with strong protections for property rights; the red curve shows countries with weaker protections. I’m not trying to argue that all environmental problems fit these curves, or that these improvements happen automatically. How fast the environment improves depends not just on money but on whether a country has an effective government, educated citizens, healthy institutions and the right laws. (For discussions of the variability of these curves and the factors that affect them, see this PERC report by a group led by Bruce Yandle of Clemson University and this article in Environment, Development and Sustainability by Kuheli Dutt of Northeastern University.) But rising incomes can make it more likely that improvements will come, and these Kuznets curves give more reason for optimism than the old idea that economic growth endangered the planet. In the 1970s, rich countries were urged to “de-develop” by Paul Ehrlich and John P. Holdren, now the White House science adviser. I welcome your thoughts on what can be learned from Kuznets curves — and whether people at opposite ends of the curves can find common ground. As America got richer in the the 20th century, emissions of sulphur dioxide rose. But thanks to new technologies, new laws and new desires for cleaner air, the trend reversed, and sulphur-dioxide pollution declined even though population and wealth kept rising.

2AC Environment 2/3

### The choice isn’t between de dev-ing and growth – it’s between heavily polluting industries and sustainable development – IT innovation solves emissions

Jokinen – Researcher, Department of Sociology, University of Turku – 98 Pekka, The Environment in an ‘Information Society’, Futures, Vol. 30, No. 6, pp. 485-498, 1998

Firstly, it is supposed that the production, transformation and exchange of infor-
mation will displace the production of tangible goods as the primary focus of economic
activities. In other words, structural economic change should lead to the decline of the
most polluting industries, ie of agriculture and manufacturing, and to the dominance of
the non-polluting industries, ie the production of information and services.

The vision of an environmentally benign structural change is illustrated by Jänicke's
two ideal types of development in western industrial countries, namely the 'superindus-
trial scenario' and the 'post-industrial scenario'." The former characterises a future in
which traditional ways of producing goods still strengthen, and in which the quantitative
growth of production, and the centralisation and internationalisation of capital and
power, will continue. As a result, of course, there will also be an increase in environmen-
tal problems. The primary criteria for the ecologically motivated post-industrial scenario,
on the other hand, is the preponderance of non-material production." Janicke does
present other criteria for the 'ecologically desirable post-industrial society', such as prefer-
ences for qualitative, resource-saving growth, decentralisation (eg small- and medium-
scale enterprises and regional structures), and flexibility in innovations. These are prim-
arily, however, to be thought of as sub-criteria for changes in economic structures. In
other words, the change to information-intensive production is supposed to be a more
or less necessary condition for these other criteria.

The model of ecological structural change equates environmental issues with the
question of continuity and the development of the industrial society. janicke's scenario
considers the (post-industrial) information society a form of society that is worth aspiring
to on environmental grounds. Moreover, in a comparative empirical study ,61 it was concluded that the de-linking of economic growth from material-intensive industrial pro-
duction processes, and the resulting decrease of environmental impacts of the economy,
is even evident in most western countries.

Information society theories suggest further grounds for environmental optimism, in
addition to structural change, in the positive belief in technological progress. This refers to
both information technology and other technologies. Generally speaking, technological
innovations are assumed to promote, eg pollution abatement and the efficient use of
natural resources, according to the most optimistic visions almost infinitely**.** To be more concrete, examples of applications of information technology, which may directly con-
tribute to the reducing of environmental stress, include pollution monitoring, online diag-
nostic services, remote sensing, and new information networks.62'63 Indirect environmen-
tal benefits might be achieved, for instance, by teleworking and the resulting decrease
in mobility, by rural telematics projects, by new research alliances, and by new horizon-
tal networks. In sum, one of the basic entities of the information society, which is the emergence
of information technologies and services, may, with the support of other new techno-
logies, lead to the dematerialisation of production and the immaterial isation of consump-
tion. It follows that, irrespective of the level of economic growth, environmental deterio-
ration might be supposed to diminish. It could even be suggested that, from the
environmental viewpoint, the process of economic dematerialisation is the most valid
indicator of the process of sustainable development.

2AC Environment 3/3

### Growth doesn’t increase environmental degradation

Levinson, Professor of Economics at Georgetown University, 2K (Arik, November/December, “The Ups and Downs of the Environmental Kuznets Curve” UCF/CentER Conference on Environment)

Conclusion Grossman and Krueger (1995), who sparked this literature, wrote in their abstract that most pollution problems appear to begin improving before countries' per capita incomes reach $8000. This description of an inverse-U-shaped pollution-income pattern set off an empirical hunt for other inverse-U-shaped patterns, and a theoretical hunt for general theories of this pattern. Meanwhile, in the text of their paper is the less eye-catching conclusion that there is "no evidence that environmental quality deteriorates steadily with economic growth." Though unsurprising to economists, who can demonstrate the result using simple theory, this finding is useful in policy circles where environmental and economic issues are often seen solely as a tradeoff. Based on this brief perusal of the literature to date, the conventional wisdom on the state of knowledge on economic growth and the environment can be summarized as follows. Empirically, many researchers have used a variety of specifications to tease inverse-U-shaped pollution-income patterns out of noisy aggregate data, though skeptics have argued that these results are not replicable, and are sensitive to functional forms and specifications. Theoretically, inverse-U-shaped pollution-income paths can be the result of numerous causes, modeled in increasingly complex ways. In some cases, the inverse-U shape may be evidence for market failures. In other cases, the shape is consistent with efficient resource allocation. The key insight therefore are that (a) pollution does not inevitably increase with growth, (b) inverse-U-shaped pollution-income paths are neither necessary nor sufficient evidence for market failures or efficiency, and (c) the inverse-U derives from a technological link between a desirable good and an undesirable side-effect, which is broader and more general than the environment. All of these points can be made without most of the empirical and theoretical mechanics in the literature. To demonstrate the first point, all we need do is show that some pollutants have declined, even in countries growing rapidly. For the second point, all that is required is a static, one-good, model, in which both the centralized (efficient) and decentralized (inefficient) pollution-income relationships are inverse-U-shaped. For the third, a few extensions into other applications suffice. As this literature inevitably proliferates, these three points will be important to keep in mind.

### Technology solves

Terry L. Anderson. 2004 No.3 Summer. “Cooling the Global Warming Debate” Hoover Digest Senior fellow at the Hoover Institution

Market forces also cause economic growth, which in turn leads to environmental improvements. Put simply, poor people are willing to sacrifice clean water and air, healthy forests, and wildlife habitat for economic growth. But as their incomes rise above subsistence, "economic growth helps to undo the damage done in earlier years," says economist Bruce Yandle. "If economic growth is good for the environment, policies that stimulate growth ought to be good for the environment." The link between greenhouse gas emissions and economic prosperity is no different. Using data from the United States, Professor Robert McCormick finds that "higher GDP reduces total net [greenhouse gas] emissions. He goes a step further by performing the complex task of estimating net U.S. carbon emissions. This requires subtracting carbon sequestration (long-term storage of carbon in soil and water) from carbon emissions. Think of it this way: When you build a house, the wood in it stores carbon. In a poor country that wood would have been burned to cook supper or to provide heat, thus releasing carbon into the atmosphere. McCormick shows that economic growth in the United States has increased carbon sequestration in many ways, including improved methods of storing waste, increased forest coverage, and greater agricultural productivity that reduces the acreage of cultivated land. Because rich economies sequester more carbon than poor ones, stored carbon must be subtracted from emissions to determine an economy's net addition to greenhouse gas emissions. McCormick's data show that "rich countries take more carbon out of the air than poorer ones" and that "the growth rate of net carbon emission per person will soon be negative in the United States." Put differently—richer may well be cooler.

## 2AC Growth Good – Global Warming 1/2

### Growth key to solve warming – no fossil fuel risk

Roberts, Staffwriter at Grist Enviromental News and Commentary, ‘6 (David, August 2, “Talking point: Global warming and economic growth” http://gristmill.grist.org/story/2006/8/2/16937/55174)

Many people in positions of power -- and not just global warming skeptics -- believe the following two things: 1. Economic growth is an engine driven by fossil fuels. Remove all restrictions on fossil fuel use, growth surges. Restrict fossil fuel use, growth slows. 2. "Doing something about global warming" means restricting or capping carbon dioxide emissions, which means restricting fossil fuel use. The inevitable conclusion is that the only way to fight global warming is to slow down and possibly cripple the economy. Thus you get calls for "certainty" about exactly how much damage global warming will do, so it can be weighed against the damage of mitigating global warming. This picture of the situation is grossly distorted. Here's why, in a nutshell: 1. Economic growth is not tied to fossil-fuel use. Many of the most promising industries of the 21st century are focused on clean energy and energy efficiency. 2. Fossil-fuel use imposes a variety of costs on the economy, from the loss of ecosystem services to increased healthcare expenditures. 3. Economies grow fastest when all economic actors face off on a level playing field, without favors or penalties from government. As it is, fossil-fuel and related industries receive a panoply of subsidies and tax breaks from government; worse, their externalities are paid for by the public. A more honest market would already have shifted growth away from dirty energy. 4. An enormous range of policies can reduce GHG emissions without directly capping or restricting them. Many of these are win-win moves, worth doing for other reasons (e.g., public health or energy independence). They include increased public transportation, zoning codes that encourage dense, mixed-use development, tighter energy-efficiency standards, development of less carbon-intensive materials (plastics, concrete, wood substitutes), and many more. And this is to say nothing of the developing world, where much of the contribution to global warming -- razing of rainforests, wood and charcoal fires for heating -- is the result of poor, short-sighted development, at great human and economic cost. "Sustainable development" is sustainable, but it's also development. Low-tech products like simple solar cookers and water purifiers, strengthened rule of law and reduced corruption, empowerment of women ... all these would both stimulate economic development and help mitigate global warming. In short, policymakers have a range of choices and strategies available to fight global warming that are commensurate with, and often conducive to, robust, sustainable economic growth.

2AC Growth Good – Global Warming 2/2

### Economic growth key to mitigate the impacts of climate change

IMF, ‘8 (April, “Climate Change and the Global Economy” World Economic Outlook, http://www.imf.org/external/pubs/ft/weo/2008/01/index.htm)

Economic and institutional development is perhaps the best means of improving climate related adaptive capacity. Development promotes diversification away from heavily exposed sectors; improves access to health, education, and water; and reduces poverty. To be effective in fostering adaptation, development strategies need to take climate change vulnerabilities into account, while seeking to avoid maladaptation (IPCC, 2007). Higher-quality institutions also strengthen countries’ ability to adapt to climate change (Kahn, 2005)

**Economic growth best for climate change**

**Anderson, John and Jean De Nault Senior Fellow at the Hoover Institution, Executive Director of the Property and Environment Research Center, and Cochair of Hoover's Property Rights, Freedom, and Prosperity Task Force, ‘4 (Terry, April 29, “The Environment: Cooling the Global-Warming Debate” Hoover Digest, http://www.hoover.org/publications/digest/3020801.html)**

In the March 2004 issue of Scientific American, National Aeronautics and Space Administration global-warming expert James Hansen notes that greenhouse gas emissions and global-warming projections are “consistently pessimistic.” Hansen suggests that projections do not take into account the lower carbon dioxide and methane emissions that have resulted from technological advancements. He explains that the lower carbon dioxide emissions result from increased energy efficiency following the energy crisis in the 1970s and the lower methane emissions, from technological changes in agriculture. Hansen’s essay concludes on an optimistic note, saying “the main elements [new technologies] required to halt climate change have come into being with remarkable rapidity.” This statement would not have surprised economist Julian Simon. He saw the “ultimate resource” to be the human mind and believed it to be best motivated by market forces. Because of a combination of market forces and technological innovations, we are not running out of natural resources. As a resource becomes more scarce, prices increase, thus encouraging development of cheaper alternatives and technological innovations. Just as fossil fuel replaced scarce whale oil, its use will be reduced by new technology and alternative fuel sources. Market forces also cause economic growth, which in turn leads to environmental improvements. Put simply, poor people are willing to sacrifice clean water and air, healthy forests, and wildlife habitat for economic growth. But as their incomes rise above subsistence, “economic growth helps to undo the damage done in earlier years,” says economist Bruce Yandle. “If economic growth is good for the environment, policies that stimulate growth ought to be good for the environment.” The link between greenhouse gas emissions and economic prosperity is no different. Using data from the United States, Professor Robert McCormick finds that “higher GDP reduces total net [greenhouse gas] emissions.” He goes a step further by performing the complex task of estimating net U.S. carbon emissions. This requires subtracting carbon sequestration (long-term storage of carbon in soil and water) from carbon emissions. Think of it this way: When you build a house, the wood in it stores carbon. In a poor country that wood would have been burned to cook supper or to provide heat, thus releasing carbon into the atmosphere. McCormick shows that economic growth in the United States has increased carbon sequestration in many ways, including improved methods of storing waste, increased forest coverage, and greater agricultural productivity that reduces the acreage of cultivated land. Because rich economies sequester more carbon than poor ones, stored carbon must be subtracted from emissions to determine an economy’s net addition to greenhouse gas emissions. McCormick’s data show that “rich countries take more carbon out of the air than poorer ones” and that “the growth rate of net carbon emission per person will soon be negative in the United States.” Put differently—richer may well be cooler. Global-warming policy analysts agree that greenhouse gas regulations such as those proposed at Kyoto would have negative impacts on the economy. Therefore, as McCormick warns, we should take great care that regulations in the name of global warming “not kill the goose that lays the golden eggs.”

## 2AC Growth Good – Hegemony

### Weakening an economy directly weakens Heg.

Pape 9 (Robert , political science @ U of Chicago, Chicago Tribune,) http://www.chicagotribune.com/news/nationworld/chi-perspec0308diplomacymar08,0,4785661.story) ET

For nearly two decades, [**the U.S.**](http://www.chicagotribune.com/topic/politics/government/national-government/united-states-ORGOV0000001.topic) has been viewed as a global hegemon—vastly more powerful than any major country in the world. Since 2000, however, our global dominance has fallen dramatically. During the Bush administration, the self-inflicted wounds of the Iraq war, growing government debt, increasingly negative current account balances and other internal economic weaknesses cost the U.S. real power in a world of rapidly spreading knowledge and technology. Simply put, the main legacy of the Bush years has been to leave the U.S. as a declining power.  From Rome to the United States today, the rise and fall of great nations have been driven primarily by economic strength. At any given moment, a state's power depends on the size and quality of its military forces and other power assets. Over time, however, power is a result of economic strength—the prerequisite for building and modernizing military forces. And so the size of the economy relative to potential rivals ultimately determines the limits of power in international politics. The power position of the U.S. is crucial to the foreign policy aims that it can achieve. Since the Cold War, America has maintained a vast array of overseas commitments, seeking to ensure peace and stability not just in its own neighborhood, the Western hemisphere, but also in Europe, Asia and the oil-rich Persian Gulf. Maintaining these commitments requires enormous resources, but American leaders in recent years chose to pursue far more ambitious goals than merely maintaining the status quo.